

# Analysis system for wine

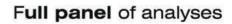




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Configuration / Analyses

of analyses

Configuration with the full panel





### Tailored panel of analyses

Configuration with tailored panel

of analyses

Display			
5,7" TFT color LCD touchscreen	4,3" Wide TFT color LCD touchscreen		
Connectivity			
2 USB 2.0 to transfer the database of performed tests and update the configuration and software	1 USB type B for technical service and PC connection		
1 USB type B for technical service and PC connection	Bluetooth 2.1		
1 Ethernet (LAN)			
Storage of results			
Internal memory to store thousands results of analyses in CSV and XML files, compatible with all database formats (e.g.:XLS, SQL).	Internal memory to store thousands results of analyses in CSV and XML files, compatible with all database formats (e.g.:XLS, SQL).		
Photometric module			
6 different wavelengths in 4 reading cells	6 different wavelengths in 4 reading cells		
Incubation module			
37°C thermostated block with 16 positions	37°C thermostated block with 3 positions		
Number of samples you can analyze at the	same time		
16	3		
Multitasking mode (possibility to perform mo	ore analyses on the same sample)		
Yes	No		
Printer			
Graphic printer on board 80 mm width	Absent		
Dimension and weight			
32 x 29,5 x 13 cm (W x D x H) 2,80 Kg	$15 \times 22 \times 8,3$ cm (W x D x H) - 0,80 Kg		
Power supply			
24 V	24 V or lithium ion battery (optional)		

# THE SYSTEM

**CDR WineLab** is composed of a thermostated analyzer based on **photometric technology** that uses **LED**; a kit with disposable pre-vialed **reagents** with **low toxicity**, in package of 10 tests, 1 year shelf life, developed and produced by the research laboratories of CDR.



Just few steps are required to perform a test. The HELP function on the display will lead you step by step through the process.

## REDUCED TESTING TIMES

With CDR WineLab now it is possible to perform the analyses autonomously, in your own winery, easily and rapidly, without relying on dedicated external laboratories. It is possible to analyze 16 samples at the same time (with the CDR WineLab model) and to monitor constantly the production process, obtaining in few minutes exact and accurate answers.

## **EASY TO USE**

The system is designed to be used by anyone, without the support of skilled staff.

The analysis methods are easier than the traditional ones and can be performed in few steps:

1 Adding the sample volume to the pre-vialed reagent.

2 Following the displayed instructions and if there is ever a doubt, the **HELP function** will lead you through the process.

**3** Results are automatically calculated, displayed and printed.

## RELIABLE

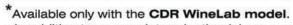
This measuring system owes its **sensitivity**, **accuracy and reliability** to the photometric technology based on LED luminous sources.

The **results** of the analyses are **correlated with the reference methods**.



### Analysis on wine with CDR WineLab

TEST	Measuring range	Repeatability	Resolution	Testing time
* Sugars in wine	0.1 - 18.0 g/L	0.2 g/L	0.1 g/L	6 min
+ Sugars in must sparkling wine	15 - 350 g/L	2 g/L	1 g/L	6 min
sparkling wine  * Glucose and fructose in wine	0.1 - 18.0 g/L	0.2 g/L	0.1 g/L	6 min
* Glucose and fructose in must, sparkling wine	15 - 350 g/L	2 g/L	1 g/L	6 min
Free SO <sub>2</sub>	1 - 60 mg/L	1.5 mg/L	1 mg/L	2 min
Total SO <sub>2</sub>	15 - 250 mg/L	2.5 mg/L	1 mg/L	1 min
L-Malic acid	0.05 - 5.00 g/L	0.05 g/L	0.01 g/L	4 min
L-Lactic acid	0.05 - 4.00 g/L	0.05 g/L	0.01 g/L	6 min
* Malolactic fermentation	0.05 - 5.00 g/L	0.05 g/L	0.01 g/L	10 min
Total acidity	1.0 - 10.0 g/L tartaric acid	0.13 g/L	0.1 g/L	1 min
Acetic acid	0.05 - 1.20 g/L	0.02 g/L	0.01 g/L	6 min
pH	3.00 - 4.00	0.02	0.01	1 min
Alcohol by volume	0.1 - 17.0% vol.	0.2% vol.	0.1% vol.	11 min
Organic nitrogen	30 - 300 mg/L	2 mg/L	1 mg/L	4 min
Organic nitrogen	30 - 300 mg/L	2 mg/L	1 mg/L	4 min
Acetaldehyde	18 - 300 mg/L	2 mg/L	1 mg/L	6 min
Glycerol	2.0 - 15.0 g/L	0.3 g/L	0.1 g/L	6 min
Gluconic acid	0.05 - 3.00 g/L	0.05 g/L	0.01 g/L	4 min
Copper	0.05 - 1.20 mg/L	0.03 mg/L	0.01 mg/L	5 min
Antocyanes	10 - 1000 mg/L cyanidin-3-0-glucoside	15 mg/L	1 mg/L	1 min + 60 min for extraction
Polyphenols FC	150 - 3300 mg/L gallic acid	10 mg/L	1 mg/L	5 min
* Catechins in wine	1 - 30 mg/L	2 mg/L	1 mg/L	11 min
* Total polyphenol index (0.D. 280nm)	1.0 - 100.0 0.D. 280 nm	0.4 0.D. 280 nm	0.1 0.D. 280 nm	11 min
*Intensity	1.0 - 40.0 O.D.	0.002 O.D.	0.001 O.D.	1 min
*Tonality T=0.D.420/0.D.520	∞	0.002 O.D.	0.001 O.D.	1 min



<sup>+</sup>In addition to sugars determination (glucose and fructose) it is possible to detect sucrose as well.

CDR WineLab Junior is configured as you like.





